

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY COMPUTER ENTERTAINMENT AMERICA LLC
and MICROSOFT CORPORATION INC.,
Petitioner,

v.

ADC TECHNOLOGY INC.,
Patent Owner.

Case CBM2015-00026
Patent 6,193,520 B1

Before MICHAEL P. TIERNEY, MICHAEL J. FITZPATRICK, and
MINN CHUNG, *Administrative Patent Judges*.

TIERNEY, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Covered Business Method Patent Review
35 U.S.C. §328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Sony Computer Entertainment America LLC and Microsoft Corporation Inc. (“Petitioner”) filed a petition on December 8, 2014 to institute a covered business method patent review of claims 8–14 of U.S. Patent No. 6,193,520 B1 (Ex. 1001, “the ’520 patent”). Paper 3. A corrected Petition (“Pet.”) was later filed on January 12, 2015. Paper 6. Patent Owner, ADC Technology Inc. (“Patent Owner”) filed a Preliminary Response (“Prelim. Resp.”) to the Petition on April 6, 2015. Paper 9.

On July 3, 2016, pursuant to 35 U.S.C. § 324, we instituted this trial as to claims 8–14 under 35 U.S.C. § 103(a) (Paper 10, “Dec. to Inst.”). After institution of the trial, Patent Owner filed a Patent Owner Response (Paper 12, “PO Resp.”), and Petitioner filed a Reply (Paper 13, “Reply”).

We have jurisdiction under 35 U.S.C. § 6(c). We have authority to issue this Final Written Decision. 35 U.S.C. § 328(a); 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 8–14 of the ’520 patent are unpatentable under 35 U.S.C. § 103(a).

A. Instituted Grounds of Unpatentability

Petitioner relies upon the following prior art in challenging the claims under 35 U.S.C. § 103(a):

U.S. 4,999,806 Chernow	Mar. 12, 1991	(Ex. 1002)
U.S. 5,547,202 Tsumura	Aug. 20, 1996	(Ex. 1003)
JP 04-10191 Kato	Jan. 14, 1992	(Ex. 1008)
English Translation of Kato		(Ex. 1009)
H6-334780 Okamoto	Dec. 2, 1994	(Ex. 1004)
English Translation of Okamoto		(Ex. 1005)
DE 19528017 A1 Nishio	Feb. 22, 1996	(Ex. 1006)
English Translation of Nishio		(Ex. 1007)

We instituted covered business method patent review on the following specific grounds (Dec. to Inst. 24):

References	Basis	Claims challenged
Chernow in view of Tsumura	§ 103(a)	8, 11, 13, and 14
Okamoto in view of Tsumura	§ 103(a)	8–11, 13, and 14
Okamoto in view of Nishio	§ 103(a)	8, 9, 11, 12, and 14
Chernow in view of Tsumura and further in view of Kato	§ 103(a)	9 and 10
Chernow in view of Tsumura and further in view of Nishio	§ 103(a)	12 and 14

B. The '520 Patent

The '520 patent is directed to an interactive communication system for transmitting video game and karaoke software via communication lines from a host facility to a calling communication terminal located at each individual home. Ex. 1001, 1:46–50.

The '520 patent states that video games are a very popular form of entertainment, but that there is “a problem: the player has to purchase each and every game cassette he wishes to play, which can be very costly.” *Id.* at 1:15–27. The '520 patent is said to solve this problem as the host facility provides the game data via the communication system. *Id.* at 2:38–42. According to the '520 patent, game data is stored in a temporary storage means and deleted in a predetermined time period so that, in order to continue the game play, a player needs to request the game data from the host facility. *Id.* at 2:49–56. This arrangement is said to be a prerequisite so long as the game data transmission service is not free of charge otherwise the service cost per each transmission would be higher than the normal price of the game cassettes. *Id.* at 2:56–65.

Figure 1 of the '520 patent is reproduced below.

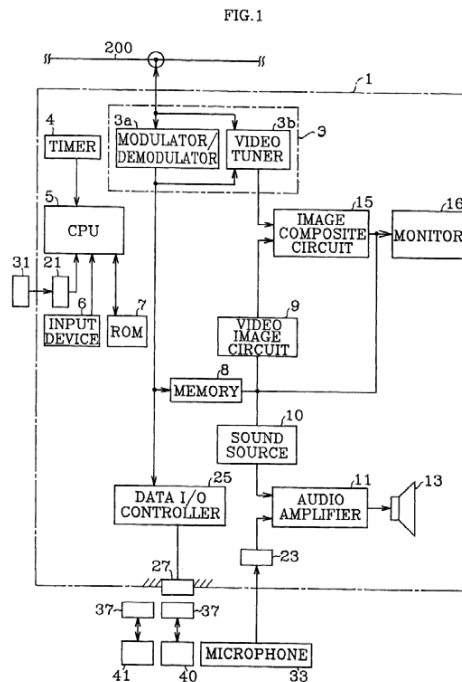


Figure 1 is a block diagram of a communication terminal device according to the invention of the '520 patent. *Id.* at 3:35–36. In response to a request

generated by personal communicator 1, a host facility (100 in Figure 2, not reproduced herein) transmits the requested data to personal communicator 1 over a transmission path 200. *Id.* at 4:39–45. In addition, the host sends data representing first, second, and third predetermined time periods (recited as “duration data” in independent claim 8) to the personal communicator 1. *Id.* at 6:20–23. When storage of the game data in memory 8 of personal communicator 1 has been completed, such completion is indicated on monitor 16. *Id.* at 6:24–28.

As explained below, execution of the received game data will be interfered with (e.g., prevented) upon detection of a predetermined time period (i.e., a “second” predetermined time period) that begins with one of the following conditions: receipt of the game data; the start of execution of the game data; or the conclusion of a period of using the game data.

Figure 7 is a flowchart of “the process to effect deletion of the game data.” *Id.* at 3:49–50. The time when data receipt by the personal communicator has been completed is read out at step S1200. *Id.* at 6:38–39. At step S1210, which is repeatedly performed, “[t]he current time is . . . read out and the time period which has elapsed after the completion of the data receipt is calculated.” *Id.* at 6:39–41. When it is determined that a first predetermined time period has elapsed, a warning of this condition is given at step S1230. *Id.* at 6:44–46. Next, “[w]hen it is determined, at step S1250, that a second predetermined time period has elapsed, the game data stored in the memory 8 is deleted at step S1260, and the instant process ends.” *Id.* at 6:47–50. In contrast to the flowchart of Figure 12, discussed below, the Figure 7 flowchart does not employ a third predetermined time period.

Figure 12 is reproduced below.

FIG. 12

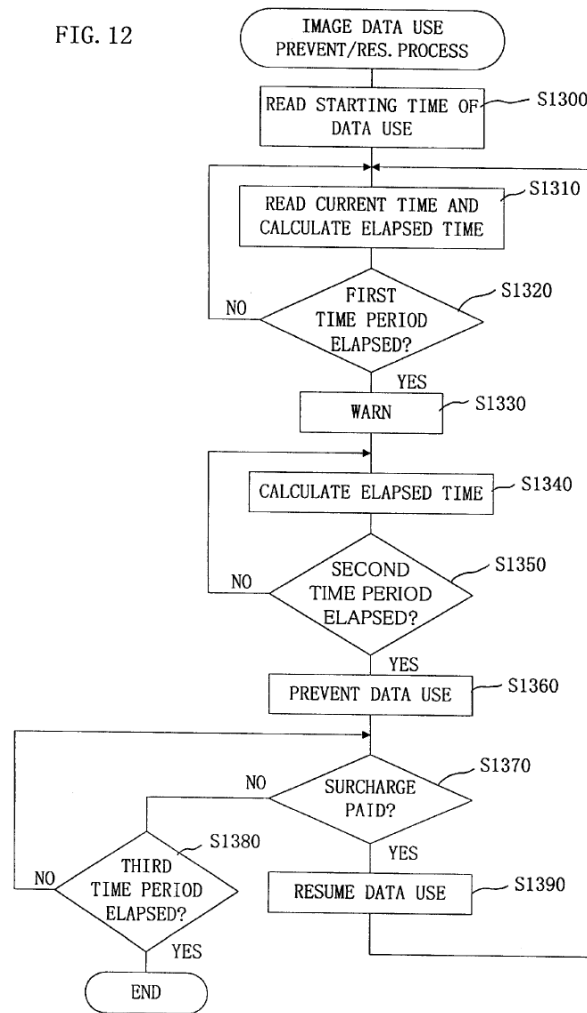


Figure 12 is a flowchart showing an embodiment in which “a predetermined time period to prevent further use of the image data is *counted from the starting time of use of the data*, not from the receiving time of the data from the host facility.” *Id.* at 11:37–41 (emphasis added). When the image data have been used for a first predetermined time period, a warning is issued at step S1330. *Id.* at 11:43–50. When it is determined, at step S1350, that the second predetermined time period has elapsed, “a process to prevent further use of the above image data is performed at step S1360.” *Id.* at 11:52–55.

In contrast to the Figure 7 embodiment, use of the image data in the Figure 12 embodiment can be resumed upon payment of a surcharge before a third predetermined time period has elapsed (at steps S1370–1390). *Id.* at 11:65–12:4. In the case where the image data stored in the memory are deleted to prevent their further use, it is preferable to preserve the image data in a not-shown temporary storage device before deleting the data from the memory and then to restore it from the temporary storage device into the memory after the surcharge is paid. *Id.* at 12:9–15.

The '520 patent specification discusses a monetary charging process to accumulate the cost for its data transmission service. *Id.* at 6:65–7:19. The specification describes the host facility (see claim 8 above) as performing the charging process to accumulate the cost for its data transmission service. *Id.* The charging system involves payment by debiting the amount to the bank account of the players. *Id.* at 7:20–24. The specification describes an arrangement that allows “parents [to] know the accumulated cost of their child’s video game play” and “leaves these children no other choice but to quit the play when a predetermined time period has elapsed.” *Id.* at 7:25–8:6.

C. Illustrative Claim

The Petitioner challenges claims 8–14 of the '520 patent. Claim 8 is an independent claim, from which claims 9–14 all depend. Illustrative claim 8 is recited below:

8. A communication system for transmitting at least one of the program, the data, and a combination of the program and data from a host facility to a communication terminal device, said communication terminal device comprising:

an input device for inputting instructions to execute the program or to process the data,

receiving means for receiving one of the program, the data, and a combination of the program and data as sent out from said host facility,

storage means for storing the program, the data, or a combination of the program and data received by said receiving means,

executing means for executing the program stored in said storage means or executing data processing by using the data stored in said storage means, in accordance with instructions from said input device,

clock means for keeping a predetermined time period after said executing means starts execution of the program or data processing, and

interference means for interfering with execution of said executing means when said clock means counts said predetermined time period; and

said host facility comprising:

storage means for storing at least one of the program, the data, and a combination of the program and data together with the duration data indicative of the predetermined time period to be counted by said clock means, and

sending out means for sending out at least one of the program, the data, and a combination of the program and data together with the duration data stored in said storage means to said communication terminal device.

D. Level of Ordinary Skill in the Art

Petitioner's declarant, Mr. Garry E. Kitchen, testifies that, based on his experience in the commercial software art, a person of ordinary skill in the art at the time of the invention would have had a Bachelor of Science degree in electrical engineering, computer engineering, computer science or a related engineering discipline or equivalent experience or education. Declaration of Garry Kitchen,

Ex. 1011 ¶ 33. Patent Owner does not dispute this recitation of the level of ordinary skill in the art. We adopt the level of ordinary skill in the art identified by Mr. Kitchen as it is consistent with the prior art of record. *See also Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art itself can reflect the appropriate level of ordinary skill in the art).

II. ANALYSIS

A. Claim Interpretation

Patent Owner represents that the '520 patent is expired, and therefore is not subject to amendment. PO Resp. 14. As the patent has expired, the claim terms are generally given their ordinary and customary meanings, as would be understood by a person of ordinary skill in the art, at the time of the invention, having taken into consideration the language of the claims, the specification, and the prosecution history of record. 37 C.F.R. § 42.300(b); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

Petitioner identifies a number of claim terms for construction and proposes constructions for the various terms. Pet. 20–32. Generally, Petitioner contends that its claim construction reflects the ordinary and customary meaning of the claim terms as understood by a person of ordinary skill in the art. *Id.* at 20. Patent Owner takes issue with only two constructions proposed by Petitioner: “interference means” and “program, data and combination.” PO Resp. 6–9.

Interference Means

Petitioner states that the recited function for interference means (claim 8) is “interfering with execution of said executing means when said clock means counts said predetermined time period.” Pet. 22. According to Petitioner, the disclosed structure for the function is a general purpose computer that is programmed to prevent further use of the program or data and described at Ex. 1001, 11:56–64 and 10:20–44. Patent Owner agrees that this is the proper definition of the term interference means. Prelim. Resp. 7–8.

Dependent claims 11, 12, 13, and 14 further define the interference means. Specifically, the dependent claims further define the interference means as follows:

Dependent Claim	Interference Means
11	“interference means comprises means for deleting at least one of the program, the data, and a combination of the program and data stored in said storage means”
12	“interference means comprises means for blocking the view of what is displayed on said screen”
13	“interference means comprises means for invalidating the operation of said input device”
14	“interference means comprises means for preventing said sound generating means from generating the sound”

Petitioner provides specific constructions for each of the interference means appearing in the dependent claims. Pet. 22–24. Patent Owner disagrees that the dependent claims recitation of interference means requires “additional functional limitations piled on top of the disclosed structure.” PO Resp. 7. Specifically, Patent Owner contends that there is only one construction of interference means, namely that which Petitioner provided with respect to

the interference means of claim 8. Petitioner disagrees with Patent Owner and contends that the four dependent claims themselves recite specific functions and must further limit the claim from which they depend. Reply 7.

We determine that it is unnecessary to determine whether Patent Owner or Petitioner is correct as to the specific construction of the interference means recited in claims 11, 12, 13, and 14 as the claims are unpatentable under either construction. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Program, Data and Combination of Program and Data

Claim 8 contains the recitation “the program, the data, and a combination of the program and data together.” Petitioner contends that the term should mean “the program and/or the data.” Pet. 28; Reply 9. Petitioner, however, contends that Patent Owner was silent as to the meaning of the term during ex parte reexamination. Pet. 29. Patent Owner generally contends that the claim recitation is definite and requires operations to be performed either on “a program, or on data, or on a combination of the program and data.” PO Resp. 8. We adopt Patent Owner’s construction (operations are performed either on “a program, or on data, or on a combination of the program and data”) as it is consistent with the plain and ordinary meaning of the term and appears to be substantially the same as Petitioner’s construction. Reply, 9–10, Ex. 1011, ¶ 54.

B. Section 103(a) Obviousness Challenge

Petitioner raises five separate challenges based on 35 U.S.C. § 103(a). Generally, Petitioner contends that claims 8, 11, 13, and 14 are unpatentable as obvious over Chernow in view of Tsumura, and claims 9 and 10 are obvious over Chernow in view of Tsumura and further in view of Kato. Additionally, Petitioner contends that claims 8–11, 13, and 14 are obvious over Okamoto in view of Tsumura, claims 8, 9, 11, 12, and 14 are obvious over Okamoto in view of Nishio, and claims 12 and 14 are obvious over Chernow in view of Tsumura and further in view of Nishio. Before considering the prior art grounds, we first analyze Patent Owner's contention that the challenged claims are entitled to the benefit of an earlier effective filing date.

1. Effective Filing Date

The '520 patent issued from U.S. Application 09/109,784, filed July 2, 1998. Ex. 1001, Ex Parte Reexamination Certificate. The '784 application is a continuation-in-part of U.S. Application 08/642,560, filed on May 3, 1996, now U.S. Pat. 5,775,995, which is a divisional of U.S. Application 08/555,400, filed on November 9, 1995, now U.S. Pat. 5,735,744, which is a continuation-in-part of U.S. Application 08/232,862, filed on April 25, 1994, now U.S. Pat. 5,489,103. *Id.*

Patent Owner contends that it is entitled to priority benefit of the November 9, 1995, filing date of U.S. Application 08/555,400, which issued as the '744 patent. PO Resp. 3. If Patent Owner were correct in that contention, the Nishio reference would not be available as prior art and, according to Patent Owner, the Declaration of Garry E. Kitchen should be

given little weight as it is premised on a 1998 date of invention. PO Resp. 4 (“[T]he ’520 Patent and its family pre-date Mr. Kitchen’s ‘early pioneering online game company’ and must therefore be an even earlier pioneering online game company.”).

To obtain benefit under 35 U.S.C. § 120, a party must establish that an earlier U.S. application complies with the first paragraph of 35 U.S.C. § 112 with respect to each claim for which benefit is desired. 35 U.S.C. § 120; *In re Lukach*, 442 F.2d 967 (CCPA 1971). The test for written description is an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Using this test, the invention must be described in a manner sufficient to demonstrate that the inventor actually invented the claimed invention. *Ariad Pharm. Inc. v. Eli Lilly & Co.*, 598 F.3d 1336 (Fed. Cir. 2010). Written description is a question of fact judged as of the relevant filing date. *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1363 (Fed. Cir. 2006).

Petitioner contends that the challenged claims of the ’520 patent are not entitled to benefit of the earlier filed applications. Pet. 16–18. According to Petitioner, none of the earlier filed applications demonstrates that Patent Owner was in possession of the invention recited in claims 8–14. Petitioner states that the clock means limitation “for keeping a predetermined time period after said executing means starts execution of the program or data processing,” as recited in independent claim 8, was added to the application that issued as the ’520 patent (along with new Figure 12), and is distinct from what was disclosed in the prior applications. *Id.* at 17–18. Specifically, Petitioner contends that the prior applications kept a predetermined time period measured from time of receipt of the transmitted

program and/or data, rather than from the time the executing means starts execution. *Id.* Petitioner relies upon the Declaration of Mr. Kitchen, who testifies that one of ordinary skill in the art would understand the parent applications as describing measuring time from receipt of the transmitted program and/or data and not containing a disclosure of a clock means for measuring time starting from the time of program execution. Ex. 1011 ¶¶ 46–47.

Patent Owner contends that the effective filing date is, at the latest, November 9, 1995, as the Examiner purportedly found support for challenged claims 8–14 in the parent applications. PO Resp. 1–3. Specifically, the Patent Owner states that during prosecution of the ’520 patent (’784 application), the Examiner rejected corresponding as-filed claims under the judicially created doctrine of obviousness-type double patenting over claims 1–3 of the parent ’995 patent. *Id.* Patent Owner cites the following passage from the ’520 patent prosecution history as support for its contention:

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: The communication system for transmitting at least one of the program, the data, and a combination of the program and data (such as software of video games or karaoke music) from the host facility to a communication termination device.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Ex. 1015, 86–90.

The obviousness-type double patenting rejection does not demonstrate that the earlier filed '995 patent described the invention, with all its claimed limitations. First, the rejection was based on obviousness, not anticipation. *See Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). (“One shows that one is ‘in possession’ of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious.”). Second, the Examiner’s identification of “common subject matter” consists merely of that which appears in the preamble of challenged claim 8. Although the Examiner stated that there was no apparent reason why the present claims were not presented in the earlier application, Mr. Kitchen presents credible testimony that the clock means limitation “for keeping a predetermined time period after said executing means starts execution of the program or data processing,” did not appear in the earlier filed applications and written description support for it was added in the continuation-in-part '784 application via new Figure 12. Ex. 1011 ¶¶ 46–47 and 49; *compare* Ex. 1001, Figures 1–14, *with* Ex. 1014, Figures 1–11. Based on the evidence of record, we credit Mr. Kitchen’s testimony as it is consistent with the evidence of record and hold that Petitioner has established that claims 8–14 are limited to the July 2, 1998, filing date of the '784 application, which resulted in the issuance of the '520 patent.

2. Background on Obviousness

An invention is not patentable under 35 U.S.C. § 103 if the subject matter would have been obvious at the time of filing. *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398 (2007). The facts underlying an obviousness inquiry

include:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966). In addressing the findings of fact, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416. As explained in *KSR*:

If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

KSR, 550 U.S. at 417. Accordingly, a central question in analyzing obviousness is often “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

3. Chernow Obviousness Challenges

Petitioner contends that claims 8, 11, 13, and 14 are unpatentable as obvious over Chernow in view of Tsumura. Pet. 32–43. Petitioner further contends that claims 9 and 10 are unpatentable as obvious over Chernow in view of Tsumura and further in view of Kato. *Id.* at 67–72. Additionally, Petitioner states that claims 12 and 14 are obvious over Chernow in view of Tsumura and further in view of Nishio. *Id.* at 72–76.

a. Chernow (Ex. 1002)

Chernow is directed to a technique for the sale and distribution of software via telephone. Ex. 1002, 1:5–7. Chernow states that its invention has an inherent low cost, as compared to distribution via floppy disk, and simple handling of software maintenance and updates. *Id.* at 1:8–19 and 2:17–19. The hardware in its simplest form is a computer with a modem attached to an ordinary telephone line. Chernow teaches that both seller and purchaser have computers with the transmitted software sent to an individual's computer where it is stored on a purchaser's hard disk. *Id.* at 2:22–30; 4:16–22. Chernow's system allows a purchaser to lease software for a prescribed term of use. *Id.* at 4:68–5:2. Chernow teaches that the software can render itself unusable or erase itself from the user's disk after the term of use has concluded. *Id.* at 5:10–19.

b. Tsumura (Ex. 1003)

Tsumura describes a system for communicating large volumes of data of the type used in computer games where games are downloaded by end user. Ex. 1003, 1:8–23. Tsumura also teaches that its receiving device outputs both display and an audio signal to an externally connected visual display and audio units to enable a game to proceed. *Id.* at 4:40–52. Tsumura discloses that a user can pay for an “amount of time” to play a downloaded game. *Id.* at 9:34–39. For example, in the case of games, Tsumura states that an additional charge facility could be incorporated that would function automatically at fixed intervals during the course of the game. *Id.* at 9:56–60. The CPU's internal clock could be used to calculate

the unit time and call for insertion of an additional fee “before a predetermined length of time has elapsed, and to cause the game to be discontinued as soon as that length of time has elapsed if the required additional fee has not been paid.” *Id.* at 9:60–65.

c. Kato (Ex. 1009)

Kato is directed to an automated software vending machine connected via a telephone line to a host station where software can be rented. Ex. 1009, 2. Kato teaches that a main control block can be programmed to start a contract time to monitor contract time and notify the user of the expiration prior to expiration. *Id.* at 27–29.

d. Nishio (Ex 1007)

Nishio describes a device for managing software amounts in which a user is informed when a defined amount of software use has been exceeded. Ex. 1007, 2. For example, when the content amount falls to zero, a CPU can deliver a symbol pattern image that is superimposed on the video signal. *Id.* Nishio states that its invention allows a user to recognize when a usage amount of software exceeds a paid amount of money. *Id.* at 3.

e. Chernow in view of Tsumura

Petitioner contends that Chernow teaches all limitations of independent claim 8, with the exception of the clock means, which is taught by Tsumura. Petitioner further contends that Chernow teaches all the additional limitations of dependent claims 11, 13, and 14, with the exception of the sound generating means, which is also taught by Tsumura. Pet. 45–

55. Petitioner provides detailed claim charts identifying where the various limitations are present in the prior art and relies upon the testimony of its proffered expert, Mr. Kitchen, who testifies that one of ordinary skill in the art would have had reason to combine the prior art and arrive at the claimed invention. For example, Mr. Kitchen testifies that one skilled in the art would have modified Chernow to measure time with the “term of use” of Tsumura to make it possible for the player to be allocated an amount of playing time corresponding to the amount of money paid. Ex. 1011 ¶ 78.

Claim 8

Patent Owner states that, as to claim 8, Chernow does not teach the required clock means and contends that Tsumura does not remedy this deficiency. PO Resp. 9. According to Patent Owner, Tsumura does not teach a clock means that associates a time period with the start of execution of the program. *Id.* Patent Owner also states that Mr. Kitchen’s testimony on this point is conclusory and is based upon a July 1998 date as opposed to a November 1995 date of invention. *Id.* at 9–10

Tsumura describes the use of a charge facility that functions automatically at fixed intervals during the course of a computer game program. Ex. 1003, 9:56–60. Tsumura describes the use of a CPU internal clock to calculate unit time and call for an additional fee before a predetermined length of time has elapsed. *Id.* at 9:60–65. An example is provided where a player is allocated an amount of playing time corresponding to the amount of money paid and the remaining value to be counted down as the player proceeded with the game. *Id.* at 9:36–39. Mr. Kitchen testifies that one of ordinary skill in the art would have recognized

that modifying Chernow to measure the lease period from the start of execution of the software would be desirable in light of Tsumura's specific teaching of charging for games at fixed time intervals throughout the game. Ex. 1011 ¶ 77. Mr. Kitchen also testifies that the modification to Chernow would be a minor software adjustment and the results would be certain. *Id.* at ¶ 79. The record supports, and we adopt, Petitioner's contentions as summarized above.

We hold that Petitioner has established, by a preponderance of evidence, claim 8 is unpatentable over Chernow in view of Tsumura. We find that Chernow teaches all the limitations recited in claim 8, with the exception of the clock means for keeping a predetermined time that is measured after execution of the program or data processing. Specifically, Chernow describes a lease having a prescribed period of time but does not state that the period of time runs from the start of execution. Ex. 1002, 4:68–5:18. One of ordinary skill in the art reading Tsumura would have recognized the benefit of starting the time period after execution of the program or data processing. Ex. 1011, ¶ 77, citing Ex. 1003, 9:56–60. We conclude that Petitioner has established that claim 8 merely recites a combination of known elements (input device, receiving means, storage means, executing means, clock means, interference means, host facility) for their known purpose (transmitting and receiving program, data and combination where clock means keeps predetermined time after start of execution) to achieve a predictable result (transmitting software via communication system where further use of program or data is prevented after predetermined time after start of execution).

Claim 11

Claim 11 depends from claim 8 and requires the interference means comprises means for deleting at least one of the program, data and combination.

Petitioner contends that Chernow describes a computer programmed to cause leased software to erase itself after calculating that the term of use has expired. Pet. 33. Patent Owner contends that Mr. Kitchen's declaration does not address the limitation of claim 11 with respect to Tsumura and Chernow. PO Resp. 10–11. Paragraph 75 of Mr. Kitchen's Declaration addresses challenged claims 8, 11, 13, and 14 in light of Chernow and Tsumura and identifies Chernow at 4:68–5:18 as teaching software that renders itself unusable or erases itself from a user's disk at the conclusion of a term of use. Ex. 1011 ¶ 75. The record supports, and we adopt, Petitioner's contentions as summarized above.

Based upon the record presented, we hold that Petitioner has demonstrated, by a preponderance of evidence, that the subject matter of dependent claim 11 would have been obvious to one of ordinary skill in the art. Petitioner has established that claim 11 represents a combination of known elements used for their known purpose to do no more than yield predictable results.

Claim 13

Claim 13 depends from claim 8 and further requires that the interference means comprises a means for invalidating the operation of the input device.

Petitioner relies upon Chernow as describing deactivating a user's keyboard and software rendering itself unusable or erasing itself. Pet. 42. Petitioner acknowledges that Chernow does not disclose how the software renders itself unusable or that the keyboard is deactivated for the purpose of invalidating the operation when the clock means counts a predetermined time period. *Id.* Petitioner relies upon Tsumura's teaching that a user can pay for an amount of time to play a downloaded game and that an input device will only be enabled once payment has been made. *Id.* (citing Ex. 1003, 9:24–29 (insertion of coins into the machine makes it possible to use input keys)). Petitioner concludes that Tsumura teaches one skilled in the art that a CPU may be used to disable the operation of an input device after an amount of time has elapsed. Pet. 42. The record supports, and we adopt, Petitioner's contentions as summarized above.

Patent Owner contends that Mr. Kitchen's declaration does not address the limitation appearing in claim 13 with respect to Tsumura and Chernow. PO Resp. 11. Patent Owner also contends that the Board has determined during prosecution that Chernow does not teach this limitation. *Id.*

We hold that Petitioner has demonstrated, by a preponderance of evidence, that the subject matter of dependent claim 13 would have been obvious to one of ordinary skill in the art. Chernow describes software rendering itself unusable or erasing itself from a user's disk. Mr. Kitchen testifies that Tsumura, like Chernow, describes disabling software after a period of usage. Ex. 1011 ¶ 76. As noted by Petitioner, Tsumura teaches one of ordinary skill in the art to enable input keys only after payment has been received. Ex. 1003, 9:23–28. Petitioner has established on this record

that claim 13 represents a combination of known elements (software transmission and invalidating the operation of an input device until payment received) used for their known purpose to do no more than yield predictable results.

Claim 14

Claim 14 depends from claim 8 and further requires a sound generating means and that the interfering means comprises means for preventing the sound generating means from generating a sound.

Petitioner states that Chernow teaches that software, such as a game, may be executed on a user's computer. Pet. 42. Similarly, Tsumura teaches that a game is played with the help of a data processing device. Further, Tsumura teaches the use of an output terminal that outputs both display and audio signals that are externally connected to video displays and audio units. Ex. 1003, 4:40–52.

Patent Owner contends that Petitioner fails to provide any teachings regarding the required sound generating means for generating a predetermined sound in accordance with the execution of the program. PO Resp. 12. According to Patent Owner, the passages relied upon by Petitioner merely teach the presence of audio units to enable the game to proceed and not an interfering means to prevent the sound generating means from generating the sound. *Id.*

As discussed above, both Chernow and Tsumura taught disabling a program. Specifically, Chernow taught one skilled in the art to render software unusable or erase itself after calculating that the term of use of the program had expired. Ex. 1002, 2:3–5, 5:10–19. Similarly, Tsumura taught

one skilled in the art to cause a game to be discontinued after a length of time had passed absent payment of a fee. Ex 1003, 9:14–10:4. Challenged claim 14 requires that the interference means comprises a means for preventing sound generation. One of ordinary skill in the art would understand that disabling a program, such as a video game, would prevent the program from generating sound in accordance with the execution of the program. Based on the foregoing, we hold that Petitioner has demonstrated, by a preponderance of evidence, that the subject matter of dependent claim 14 would have been obvious to one of ordinary skill in the art.

f. Chernow in view of Tsumura and further in view of Kato

Claim 9 depends upon claim 8 and further requires a second clock means for keeping a second predetermined time period and an alarm means. Claim 10 depends upon claim 9 and additionally requires a third clock means for keeping a third predetermined time.

Petitioner contends that Chernow, Tsumura and Kato are in the same field of endeavor as the '520 patent, transmission of software from a host facility to a communication terminal device. Pet. 68–69. Petitioner relies upon the teachings of Chernow and Tsumura as teaching every limitation of claim 8 and Kato as teaching one skilled in the art that a main control block can be programmed to start a contract time to monitor contract time and notify the user of the expiration prior to expiration. Ex. 1009, 27–29. Petitioner contends that it would have been obvious to one of ordinary skill in the art to implement the claimed system in which the user is provided with a notification of expiration of the initial term in light of Kato's teaching

concerning notification of a user prior to expiration. Pet. 69–70. The record supports, and we adopt, Petitioner’s contentions as summarized above.

Patent Owner contends that Chernow does not teach the clock means and that Kato fails to remedy Chernow and Tsumura’s failure to disclose the required second clock means. PO Resp. 13.

Kato teaches one of ordinary skill in the art to count a short time period in order to provide an alarm before taking an action. Ex. 1009, 28–29; Ex. 1010, 399. Mr. Kitchen testifies that one skilled in the art would have appreciated the benefit of issuing a notification to a user prior to expiration of the term of use. Ex. 1011 ¶ 118. Mr. Kitchen testifies that it would be nothing more than ordinary skill and common sense to combine the notification of the expiration taught by Kato with the systems of Chernow and Tsumura in order to provide advanced notification of the expiration of the term of use. *Id.* at ¶ 119.

We hold that Petitioner has demonstrated, by a preponderance of evidence, that the subject matter of dependent claims 9 and 10 would have been obvious to one of ordinary skill in the art. Specifically, we credit the testimony of Mr. Kitchen as it is consistent with the teaching of the references of record. We further hold that Petitioner has demonstrated that claims 9 and 10 are directed to a combination of known elements, for their known purpose to achieve a predictable result, keeping additional clocks so that a user could be notified prior to expiration of the term of use.

g. Chernow in view of Tsumura in further in view of
Nishio

Claim 12 depends from claim 8 and requires a display having a screen on which the progress of the execution of the program or data is displayed and an interference means comprising a means for blocking the view of the display. Claim 14 depends from claim 8 and further requires a sound generating means and an interference means that comprises a means for preventing the sound generating means from generating the sound.

Petitioner contends that Chernow, Tsumura and Nishio each address the problem of monitoring rented software and interfering with the execution of the software after expiration of a certain time limit. Pet. 72–73.

Petitioner relies upon Chernow and Tsumura as discussed above, but acknowledges that Chernow does not disclose the means for blocking the view of what is displayed on the screen and the sound generating means of claim 14. Pet. 75. Petitioner provides a detailed claim chart identifying where Nishio describes the interference means of claim 12 and the sound generating means of claim 14. *Id.*, citing Ex. 1007, 5, 9, 10, 14 and Figs. 2, 7, 12 and 13. The record supports, and we adopt, Petitioner’s contentions as summarized above.

Mr. Kitchen testifies that one of ordinary skill in the art at the time of the invention would have recognized the desirability of modifying Chernow to incorporate the identified features of Tsumura and Nishio in the system of Chernow. Ex. 1011 ¶¶ 120–132. For example, Mr. Kitchen testifies that the claimed invention involves nothing more than the combination of known features, for their known purpose to achieve a predictable result. *Id.* at ¶ 132.

Patent Owner contends that Nishio is not available as prior art. PO Resp. 13. Additionally, Patent Owner contends that Nishio does not teach

blocking the view of what is displayed on the screen and preventing the sound generating means from generating sound. *Id.*

As discussed above, we hold that Petitioner has established that the effective filing date of the challenged claims is the actual filing date of the '520 patent (i.e., July 2, 1998) and, as a consequence, Nishio, published February 22, 1996, is available as prior art. Nishio seeks to provide a device for managing a software usage amount, where the device is capable of preventing further use of the software and the user is informed of the fact that the software usage amount has reached a defined amount such that usable data is output in incomplete form. Ex. 1007, 3 ¶ 7. Mr. Kitchen testifies that one skilled in the art would understand that Nishio teaches non-destructive interference, either through obscured or altered picture or muted sound. Ex. 1011 ¶ 129. We credit Mr. Kitchen's testimony as it is consistent with the teachings of the prior art. We hold that Petitioner has demonstrated, by a preponderance of evidence, that the subject matter of dependent claims 12 and 14 would have been obvious to one of ordinary skill in the art. We conclude that Petitioner has demonstrated that claims 12 and 14 are directed to a combination of known elements, for their known purpose to achieve a predictable result, informing a user that they reached a defined amount of time by interrupting audio or video signals.

4. Okamoto Obviousness Challenges

a. Okamoto in view of Tsumura: Claims 8–11, 13, and 14

Okamoto is directed to game and karaoke machines that can play games without game cassettes by receiving game or karaoke information transmitted using communication lines. Ex. 1005, 2. Okamoto describes

transmitting the game information and erasing the information after a specified time has elapsed since the transmission. *Id.* at 7 ¶ 12.

Petitioner provides detailed claim charts identifying where each limitation of independent claim 8 and dependent claims 9, 11, and 14 is found in Okamoto and Tsumura. Pet. 45–55. For example, Petitioner relies upon Tsumura for its disclosure of keeping a predetermined time period after the start of execution. Pet. 48, citing Ex. 1003, 2:3–9 and 9:14–10:4. Additionally, Petitioner relies upon Tsumura’s teaching of an interference stop instruction (instruction to pay an additional fee and continue playing the game) and Tsumura’s teaching of a means for stopping the interference (CPU programmed to determine whether the additional fee has been paid). Pet. 52–53, citing Ex. 1003, 9:14–10:4. Mr. Kitchen testifies that one skilled in the art at the time of the invention would have modified Okamoto to include the additional features as Tsumura teaches the benefits of these features such as the desirability of incorporating an additional charge facility that would function automatically at fixed intervals during the course of a game. Ex. 1011 ¶¶ 83–92. The record supports, and we adopt, Petitioner’s contentions as summarized above.

Patent Owner’s sole contention is that “[a]s discussed above, Tsumura fails to teach the limitations in Claims 8–11 and 12–14.” PO Resp. 14. We have considered Patent Owner’s contention but are not persuaded. Rather, based on the evidence of record, we credit Mr. Kitchen’s testimony as it is consistent with the evidence of record. Additionally, we find that Okamoto and Tsumura teach all the limitations recited in claims 8–11, 13, and 14. We hold that Petitioner has established that claims 8–11, 13, and 14 are unpatentable as obvious over Okamoto in view of Tsumura as the challenged

claims represent a combination of known elements for their known purpose to achieve a predictable result.

b. Okamoto in view of Nishio: Claims 8, 9, 11, 12, and 14

Petitioner provides detailed claim charts identifying where Nishio and Okamoto describe the various features recited in the challenged claims. *Id.* at 59–67. Mr. Kitchen testifies that one of ordinary skill in the art at the time of the invention would have recognized the desirability of incorporating the identified features of Nishio into the system of Okamoto. Ex.1011 ¶¶ 93–107. Specifically, Mr. Kitchen testifies that a skilled artisan would have appreciated the benefit of charging based on actual use of the software as described by Nishio and as Nishio teaches the advantages of interfering with execution of a program without terminating the program. *Id.* at ¶¶ 101 and 104. The record supports, and we adopt, Petitioner’s contentions as summarized above.

Patent Owner’s sole contention is that Nishio is not available as prior art. PO Resp. 14. For the reasons provided above, we hold that Nishio is available as prior art to the challenged claims.

Based on the evidence of record, we credit Mr. Kitchen’s testimony and hold that Petitioner has established, by a preponderance of evidence, that claims 8, 9, 11, 12, and 14 are unpatentable as obvious over Okamoto in view of Nishio.

III. ORDER

Accordingly, it is

ORDERED that claims 8–14 of the '520 patent are held unpatentable;
and

FURTHER ORDERED that, because this is a Final Written Decision,
parties to the proceeding seeking judicial review of the decision must
comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:

Eric Buresh
eric.buresh@eriseip.com
Mark Lang
mark.lang@eriseip.com
Joseph T. Jakubek
joseph.jakubek@klarquist.com

PATENT OWNER:

John E. Whitaker
Marcia Tunheim
Whitaker Law Group
john@wlawgrp.com